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| 10/045,741 | 10/26/2001 | William H. Schiffbauer | 6395-61321 | 9697 |
| 7590 | 11/20/2003 | | EXAMINER | |
| KLARQUIST SPARKMAN, LLP Suite 1600 121 SW Salmon Street One World Trade Center Portland, OR 97204-2988 | | | LE, JOHN H | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

| | | |
|------------------------------|-----------------------|-------------------------|
| Office Action Summary | Application No. | Applicant(s) |
| | 10/045,741 | SCHIFFBAUER, WILLIAM H. |
| | Examiner John H Le | Art Unit 2863 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 22 September 2003.

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-26 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-26 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on 26 October 2001 is/are: a) accepted or b) objected to by the Examiner.

 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.

 If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

 1. Certified copies of the priority documents have been received.

 2. Certified copies of the priority documents have been received in Application No. _____.

 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

 a) The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____

4) Interview Summary (PTO-413) Paper No(s) _____

5) Notice of Informal Patent Application (PTO-152)

6) Other: _____

Responses to Amendment

1. This office action is in response to applicant's amendment received on 09/22/2003.

Claims 1 and 23 have been amended.

Specification

2. The abstract of the disclosure is objected to because the abstract should be in narrative form and generally limited to a single paragraph on a separate sheet limited to 150 words. Correction is required. See 37CFR 1.72.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1 and 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schiffbauer et al. (USP 5,939,986) in view of Story (USP 3,708,671).

Regarding claim 1, Schiffbauer et al. disclose a hazardous area warning system for warning personnel of an attendant hazard when they may enter into hazardous areas, the system comprising a receiver 26 for receiving a directional signal indicating proximity of a hazard, and including circuitry that indicates a level of received directional signal in a direction (Col.4, line 38-Col.5, line 22/Col.5, line 52-Col.6, line 31), means for determining based on the indicated level of received directional signal in the direction whether a received signal indicates proximity to an attendant hazard (Col.5, line 58-

Col.6, line 31); and means 24 for transmitting an indication of whether a person wearing the directional receiving means is in a hazardous area (Col.4, line 38-Col.5, line 18).

Regarding claims 16-17, Schiffbauer et al. teach an antenna being a ferrite rod wrapped in wire, a receiver comprising an antenna, an amplifier, a filter, and detector (Fig.3)(Col.5, lines 10-18/Col.5, line 58-65), transmitter comprising an oscillator, an buffer amplifier, and an antenna driver (Fig.2)(Col.5, lines 23-51).

Schiffbauer et al. fail to teach circuitry that indicates a level of the received directional signal in a plurality of different directions.

Story teach a radiant energy detector adapted to produce a plurality of discrete output signals each indicative of a given level of radiation received from a different direction, a plurality of distinguishable indicators mounted for visual observation by the pilot and each representing one of the different directions indicated by the output signals, and a control circuit connected to receive the output signals and adapted to energize an indicator representing a given direction in response to reception of an output signal indicative thereof (Col.1, lines 40-52).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include a radiant energy detector adapted to produce a plurality of discrete output signals each indicative of a given level of radiation received from a different direction, a plurality of distinguishable indicators mounted for visual observation by the pilot and each representing one of the different directions indicated by the output signals as taught by Story in a hazardous area warning system of Schiffbauer et al. for

the purpose of providing an indicating system for warning a pilot of an aircraft of the presence of an intruder aircraft in the area (Story, Col.1, line 52-56).

5. Claims 2-9 and 18-21 rejected under 35 U.S.C. 103(a) as being unpatentable over Schiffbauer et al. (USP 5,939,986) in view of Story (USP 3,708,671) as applied to claim 1 above, and further in view of Weinstein (USP 5,170,172) and Kirtley et al. (USP 4,849,735).

Regarding claims 2-4 and 18, the combination of Schiffbauer et al. and Story discussed *supra*, disclosed the claimed invention except the hazard warning system proximity receiver with a mutually perpendicular 3-axis antenna, combining received signals from 3-axis antenna, comparator, encoder.

Weinstein teaches a receiver 13 with a mutually perpendicular 3-axis antenna (e.g. Col.4, lines 13-47), combining received signals from 3-axis antenna (e.g. Col.9, line 64-Col.10, line 18), comparator (e.g. Col.13, lines 30-34). Weinstein an amplifier/filter 26 (Col.4, lines 52-53) and detectors 32, 33 (e.g. Col.5, lines 66-68).

Kirtley et al. teach an encoder 21 (e.g. Col.7, lines 15-22).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include a receiver 13 with a mutually perpendicular 3-axis antenna, comparator, encoder 21 as taught by the combination of Weinstein and Kirtley et al. in a hazardous area warning system of Schiffbauer et al. in view of Story for the purpose of providing an output indication based upon the composite field strength of the signals detected by the receiving antenna (Weinstein, Col.1, line 52-56).

Regarding claims 5-9 and 19-21, the combination of Schiffbauer et al., Story, and Weinstein discussed *supra*, discloses the claimed invention except comparator means for indicating the distance from receiver to the transmitter in order to place an output signal indicate the level of danger.

Kirtley et al. teach comparator means for indicating the distance from receiver to the transmitter in order to place an output signal indicate the level of danger (Col.6, lines 8-24/Col.1, lines 23-40).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include comparator means for indicates the distance from receiver to the transmitter in order to place an output signal indicate the level of danger as taught by Kirtley et al. in a hazardous area warning system of Schiffbauer et al. in view of Story and Weinstein for the purpose of providing a radio controlled safety stop system for forklift trucks that will alert the driver that he is approaching a danger zone when the forklift truck is a predetermined distance from the door, and which automatically interrupts the ignition system of the forklift truck to thereby stop the forklift truck if the forklift truck operator ignores the warning system and continues moving in the direction of danger (Kirtley et al., Col.4, line 52-Col.5, line 20).

6. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schiffbauer et al. (USP 5,939,986) in view of Story (USP 3,708,671), Weinstein (USP 5,170,172) and Kirtley et al. (USP 4,849,735) as applied to claims 18-20 above, and further in view of Schiemann (USP 4,518,009).

Regarding claim 22, the combination of Schiffbauer et al., Story, and Kirtley et al. discussed supra, discloses the claimed invention except the danger indicator is a motor, vibrations from said motor providing an indication of danger.

Schiemann teaches comparator the danger indicator is a motor, vibrations from the motor providing an indication of danger (Col.3, lines 39-47).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the danger indicator is a motor and vibrations from the motor providing an indication of danger as taught by Schiemann in a hazardous area warning system of Schiffbauer et al. in view of Story and Kirtley et al. for the purpose of providing a device to avoid the car, which running out of gas (Schiemann, Col.3, lines 39-47).

7. Claim 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schiffbauer et al. (USP 5,939,986) in view of Story (USP 3,708,671) and Kirtley et al. (USP 4,849,735) as applied to claims 1-3 and 5-7 above, and further in view of Sivakumar (US 2002/0049056 A1).

Regarding claim 10, the combination of Schiffbauer et al., Story, and Kirtley et al. discussed supra, discloses the claimed invention except the vibrating means for providing personnel with a tactile indication of danger.

Sivakumar teaches the vibrating means for providing personnel with a tactile indication of danger [0037].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the vibrating means for providing personnel with a tactile

indication of danger as taught by Sivakumar in a hazardous area warning system of Schiffbauer et al. in view of Story and Kirtley et al. for the purpose of providing an improved system for providing information on local circumstances, especially for handicapped people (Sivakumar, [0005]).

8. Claims 11, 23-24 are rejected under 35 U.S.C. 103(a) as being obvious over Schiffbauer et al. (USP 5,939,986) in view of Story (USP 3,708,671) as applied to claim 1 above, and further in view of Kirtley et al. (USP 4,849,735).

Regarding claims 11 and 23, the combination of Schiffbauer et al. Story and discussed supra, discloses the claimed invention except data receiver means receiving a signal from said transmitting means; decoder means decoding said received signal; driver means driving a plurality of outputs responsive to said decoder means, and indicator means indicating a safety state responsive to said driver means.

Regarding claim 24, Schiffbauer et al. teach a danger zone indicator, a caution indicator and a normal indicator (Col.5, lines 58-65).

Kirtley et al. teach a radio control safety system comprising data receiver (Fig.4) receiving a signal from the transmitter (Fig.3); decoder means 38 decoding the received signal; driver means driving a plurality of outputs responsive to the decoder means (Col.7, lines 15-48), and alarm sound, which read on indicator means indicating a safety state responsive to the driver means (Col.7, lines 2-5, lines 36-48).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include data receiver, decoder means decoding the received signal; driver means, and indicator means as taught by Kirtley et al. in a hazardous area

warning system of Schiffbauer et al. in view of Story for the purpose of providing a radio controlled safety stop system for forklift trucks that will alert the driver that he is approaching a danger zone when the forklift truck is a predetermined distance from the door, and which automatically interrupts the ignition system of the forklift truck to thereby stop the forklift truck if the forklift truck operator ignores the warning system and continues moving in the direction of danger (Kirtley et al. , Col.4, line 60-Col.5, line 20).

9: Claims 12-15, 25-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schiffbauer et al. (USP 5,939,986) in view of Story (USP 3,708,671) and Kirtley et al. (USP 4,849,735) as applied to claims 23 above, and further in view of Spencer (USP 4,906,972).

Regarding claims 12-13, 25 and 26, the combination of Schiffbauer et al., Story, and Kirtley et al. teach indicators are a red light, yellow light, wherein red light, yellow light are LEDs (Col.5, lines 58-65).

Regarding claims 14-15, the combination of Schiffbauer et al., Story, and Kirtley et al. teach means for disabling a system being monitored (Kirtley et al. Col.4, line 60-Col.5, line 8), a first data logger logging danger situation occurrences; and a second data logger logging caution condition occurrences (Schiffbauer et al., Col.5, lines 58-65).

Schiffbauer et al. fail to teach indicator is green light.

Spencer teaches the indicator is green light (Col.7, lines 6-19).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include indicator is green light as taught by Spencer in a

hazardous area warning system of Schiffbauer et al. in view of Story and Kirtley et al. for the purpose of providing a communication system for hazardous areas.

Response to Arguments

10. Applicant's arguments filed 09/22/2003 have been fully considered but they are not persuasive.

-Applicant argues that the prior did not teach "circuitry that indicates a level of the received directional signal in a plurality of different directions".

The combination of Schiffbauer et al. and Story teach "circuitry that indicates a level of the received directional signal in a plurality of different directions" as discussed above.

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

12. Specifically Story and Weinstein have been added to second ground of rejection.

Contact Information

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John H. Le whose telephone number is (703) 605-4361. The examiner can normally be reached on 9:00 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E. Barlow can be reached on (703) 308-3126. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

John H. Le

Patent Examiner-Group 2863

November 5, 2003



John Barlow
Supervisory Patent Examiner
Technology Center 2800